

CLAIMS

1. A container formed from a blank, the container comprising:

a base panel;

two opposing side walls connected to the base panel at substantially a 90°

5 angle;

two opposing end walls connected to the base panel at an angle less than 90°, the end walls having a width equal or less than the width of upper edges of the side walls, each end wall having an end flap connected to opposing sides of the end wall, each end flap having a lock recess disposed along a top edge of thereof;

10 locking flaps connected to the side walls by at least one pair of lock hinge assemblies, wherein each locking flap folds inwardly to sandwich adjacent end flaps between the locking flap and an adjacent side wall and further, wherein each locking hinge assembly locks into the lock recess of the adjacent end flap; and

a reinforcement flap connected to at least one end wall by at least one
15 doubled stacking tab, wherein the reinforcement flap lies flush against an inner surface of the at least one end wall.

2. The container according to claim 1, wherein the base panel further comprises at least one stacking slot cut into the base panel, the at least one stacking slot positioned to accept the at least one doubled stacking tab extending from an angled end wall of a
20 sub-adjacent container.

3. The container according to claim 2, wherein the at least one stacking slot is positioned adjacent to the at least one end wall.

4. The container according to claim 3, wherein the at least one end wall has a first thickness and further comprises a crushed area, the crushed area having a second

thickness, the second thickness being less than the first thickness, wherein a bottom of the crushed area is adjacent to the at least one stacking slot.

5 5. The container according to claim 3, further comprising a tab flap disposed on the base panel adjacent to the at least one stacking slot, the flap having a contact edge disposed adjacent and parallel to the at least one stacking slot.

6. The container according to claim 1, wherein the end flap has a bottom edge that angles divergently upward from a bottom edge of an adjacent end wall.

7. The container according to claim 1, wherein the reinforcement flap has corner flaps attached to opposing side edges thereof, and further wherein each corner flap
10 extends diagonally towards an adjacent locking flap.

8. The container according to claim 7, wherein the locking flap has at least one lock slot disposed along an outer edge thereof, a lock tab projects from a side edge of the corner flap and further, wherein the lock tab extends into at least one lock slot.

9. The container according to claim 1, wherein a bottom tab projects from a
15 bottom edge of at least one end flap, at least one tab slot is disposed on the base panel adjacent to the side wall and further, wherein the bottom tab extends into the at least one tab slot.

10. A container formed from a blank, the container comprising:

20 a base panel;
two opposing end walls connected to the base panel at substantially a 90° angle;

two opposing side walls connected to the base panel at an angle less than 90°, the side walls having a width equal or greater than the width of upper edges of the

end walls, each side wall having an side flap connected to opposing sides of the side wall, each side flap having a lock recess along a top edge thereof,

locking flaps connected to the end walls by at least one pair of lock hinge assemblies, wherein each locking flap folds inwardly to sandwich adjacent side flaps between the locking flap and an adjacent end wall and further, wherein each locking
5 hinge assembly locks into the lock recess of the adjacent side flap; and

a reinforcement flap connected to a first at least one side wall by at least one doubled stacking tab, wherein the reinforcement flap lies flush against an inner surface of the at least one side wall.

10 11. The container according to claim 10, wherein the base panel further comprises at least one stacking slot cut into the base panel, the at least stacking one slot positioned to accept the at least one doubled stacking tab extending from an angled side wall of a sub-adjacent container.

12. The container according to claim 11, wherein the at least one stacking slot is
15 positioned adjacent to the at least one side wall.

13. The container according to claim 12, wherein the at least one side wall has a first thickness and further comprises a crushed area, the crushed area having a second thickness, the second thickness being less than the first thickness, wherein a bottom of the crushed area is adjacent to the at least one stacking slot.

20 14. The container according to claim 12, further comprising a flap tab disposed on the base panel adjacent to the at least one stacking slot, the flap tab having a contact edge disposed adjacent and parallel to the at least one stacking slot.

15. The container according to claim 10, wherein the side flap has a bottom edge that angles divergently upward from a bottom edge of an adjacent side wall.

16. The container according to claim 10, wherein the reinforcement flap further has first corner flaps attached to opposing edges thereof and further, wherein each first corner flap extends diagonally towards an adjacent locking flap.

17. The container according to claim 16, wherein, the locking flap has a first lock
5 slot disposed along an outer edge thereof, a first lock tab projects from a side edge of the first corner flap and further, wherein the first lock tab extends into an adjacent first lock slot.

18. The container according to claim 10, wherein a bottom tab projects from a bottom edge of at least one side flap and at least one tab slot is disposed on the base
10 panel adjacent to the end wall and further, wherein the bottom tab extends into the at least tab slot.

19. The container according to claim 10, wherein a second at least one side wall further comprises a window recess disposed along an upper edge thereof.

20. The container according to claim 19, further comprising at least one
15 reinforcement piece, the at least one reinforcement piece connected to the upper edge of the second at least one side wall, wherein the reinforcement piece lies flush against an inner surface of the second at least one side wall, the at least one reinforcement piece further comprising a second corner flap connected to a side end of the at least one reinforcement piece and further, wherein the second corner flap extends diagonally from
20 at least one reinforcement piece towards an adjacent locking flap.

21. The container according to claim 20, wherein the locking flap comprises a second lock slot disposed along the outer edge thereof, a second lock tab projects from a side edge of the second corner flap and further, wherein the second lock tab extends into the second lock slot.

22. The container of claim 10, wherein at least one end wall has an end tab projecting from an upper edge thereof and a tab recess disposed along a bottom edge thereof, wherein at least one side flap adjacent to the at least one end wall has an upper tab projecting from a top edge thereof and a flap notch disposed on the bottom edge thereof, wherein the base panel has a tongue disposed adjacent to the tab recess, wherein
5 the locking flap adjacent to the at least one end wall has an end tab recess adjacent to the end tab, and further, wherein the upper tab projects through the end tab recess.

23. A container formed from a blank, the container comprising:

a base panel;

10 two opposing end walls connected to the base panel at substantially a 90° angle;

two opposing side walls connected to the base panel at an angle less than 90°, the side walls having a width equal or greater than the width of upper edges of the end walls;

15 side flaps connected to opposing sides of the side walls, the side flap comprising an inner flap connected to an outer flap, wherein the inner flap has a first lock recess along a top edge thereof, the outer flap has a second lock recess along a top edge thereof and further, wherein the side flap is folded inwardly so that the outer flap lies flush against an inner surface of the inner flap; and

20 locking flaps connected to the end walls by at least one pair of lock hinge assemblies, wherein each locking flap folds inwardly to sandwich adjacent folded side flaps between the locking flap and an adjacent end wall and further, wherein each locking hinge assembly locks into the first and second lock recess of the adjacent folded side flap.

24. The container according to claim 23, wherein at least one stacking tab projects from an upper edge of at least one side wall.

25. The container according to claim 24, wherein the base panel further comprises at least one stacking slot cut into the base panel, the at least stacking one slot positioned to accept the at least one stacking tab extending from an angled side wall of a sub-adjacent container.

26. The container according to claim 25, wherein the at least one side wall has a first thickness and further comprises a crushed area, the crushed area having a second thickness, the second thickness being less than the first thickness, wherein a bottom of the crushed area is adjacent to the at least one stacking slot.

27. The container according to claim 25, further comprising a flap tab disposed on the base panel adjacent to the at least one stacking slot, the flap tab having a contact edge disposed adjacent and parallel to the at least one stacking slot.

28. The container according to claim 23, further comprising a reinforcement flap connected to an upper edge of a first at least one side wall by at least one doubled stacking tab, wherein the reinforcement flap lies flush against an inner surface of the at least one side wall.

29. The container according to claim 28, wherein the base panel further comprises at least one stacking slot cut into the base panel, the at least one stacking slot positioned to accept the at least one doubled stacking tab extending from an angled side wall of a sub-adjacently stacked container.

30. The container according to claim 29, wherein the at least one stacking slot is positioned adjacent to the at least one side wall.

31. The container according to claim 30, further comprising a flap tab disposed on the base panel adjacent to the at least one stacking slot, the flap tab having a contact edge disposed adjacent and parallel to the at least one stacking slot.

32. The container according to claim 28, wherein the reinforcement flap has a first corner flap attached to opposing side edges thereof and further, wherein the first corner flap extends diagonally towards an adjacent locking flap.

33. The container according to claim 32, wherein the locking flap has a first lock slot disposed along an outer edge thereof, a first lock tab projects from a side edge of the first corner flap and further, wherein the first lock tab extends into the first lock slot

34. The container according to claim 23, wherein a second at least one side wall further comprises a window recess disposed along an upper edge.

35. The container according to claim 34, further comprising at least one reinforcement piece, the at least one reinforcement piece connected to the upper edge of the second at least one side wall, wherein the reinforcement piece lies flush against an inner surface of the second at least one side wall, the at least one reinforcement piece further comprising a second corner flap connected to a side end of the at least one reinforcement piece, wherein the corner flap extends diagonally from at least one reinforcement piece towards an locking flap.

36. The container according to claim 35, wherein the locking flap comprises a second lock slot disposed along the outer edge thereof, a second lock tab projects from a side edge of the second corner flap and further, wherein the second lock tab extends into the second lock slot.

37. The container of claim 23, wherein at least one end wall has an end tab projecting from an upper edge and a tab recess along a bottom edge thereof, wherein at

least one side flap adjacent to the at least one end wall has an upper tab projecting from the top edge and a flap notch disposed on the bottom edge thereof, wherein the base panel further has a tongue disposed adjacent to the at least one end wall, wherein the locking flap adjacent to the at least one end wall has an end tab recess adjacent to the end tab, and further, wherein the upper tab projects through the end tab recess.

38. The container according to claim 23, wherein a first bottom tab projects from a bottom edge of at least one inner flap, a second bottom tab projects from a bottom edge of an outer flap adjacent to the at least one inner flap, at least one tab slot is disposed on the base panel adjacent to the end wall and further, wherein the first and second bottom tab extend into the tab slot.

39. A blank for a container, the blank comprising:

a base panel having a first pair of opposing base edges and a second pair of opposing base edges;

two opposing first walls foldably connected to the first pair of base edges along a first fold line, each first wall having a first wall outer edge and opposing first wall side edges;

two opposing second walls foldably connected to the second pair of base edges along a second fold line, each second wall having a second wall outer edge and opposing second wall side edges;

locking flaps hingeably connected to each first wall outer edge by at least one pair of hinges;

side flaps foldably connected to each second wall side edge, each side flap having a flap top edge, wherein a lock recess is disposed along each flap top edge;

at least one stacking tab projecting outwards from at least one second wall
outer edge;

wherein as assembled, the first walls fold at substantially a 90° to the base
panel along the first fold line, the second walls fold at an angle less than 90° to the base
5 panel along the second fold line, the locking flaps fold inwardly to sandwich adjacent
side flaps between the locking flap and an adjacent first wall and further, wherein each
hinge locks into the lock recess of the adjacent side flap.

40. The blank of claim 39, further comprising:

at least one reinforcement flap having a pair of opposing flap side edges
10 and a pair of opposing flap end edges, wherein at least one reinforcement tab projects
from a flap side edge and further, wherein the reinforcement tab is foldably connected to
the at least one stacking tab along a tab fold line; and

corner flaps foldably connected to each flap end edge along a corner fold
line;

15 wherein as assembled, the reinforcement flap folds inwardly along the tab
fold line to lie flush against an inner surface of the at least one second wall, each corner
flap folds along the corner fold line to extend diagonally towards an adjacent locking
flap and further, wherein the reinforcement tab lies juxtaposed against an inner surface of
the stacking tab to form a doubled tab.

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